



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,177	03/17/2004	Timothy W. Mehnert	36185	3849
116	7590	03/24/2005	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			VASUDEVA, AJAY	
			ART UNIT	PAPER NUMBER
			3617	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,177

Applicant(s)

MEHNERT, TIMOTHY W.

Examiner

Ajay Vasudeva

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date rec'd 12/23/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

New Grounds of Rejection

1. In view of newly discovered prior art reference(s), this Office action contains a Non-Final rejection based on new grounds. The examiner regrets the resulting inconvenience to the applicant.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 12/23/2004 was filed after the mailing date of the first Office action on 8/25/2004. The submission is deemed to be in compliance with the provisions of 37 CFR 1.97(c) because appropriate fee has been charged, as set forth in 37 CFR 1.17(p). Accordingly, the IDS is being considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s).

- The switch being electrically connected to an indicator light, as set forth in claim 5.

It is recommended that a circuit diagram be provided to illustrate the claimed electrical connection.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

Art Unit: 3617

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "**Replacement Sheet**" or "**New Sheet**" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- The brackets being adjustable to adjust a sensitivity of the switch, as set forth in claim 6 (emphasis provided).
- The cam having a substantially D-shaped cross section, as set forth in claim 11.

Claim Objection

5. Claim 6 is objected to because of the following informalities:

In the claim, Applicant recites "brackets are adjustable to adjust a sensitivity of the switch" (emphasis provided). However, it is not very clear if the limitation "adjust the sensitivity" has been used to claim an "adjustment in the position" of the switch (as explained page 5, paragraph 19 of the specification), or if such limitation has been used to mean a "variable degree of response" of the switch.

Appropriate correction/clarification is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 6-8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 59-045295 A ('295).

Re claims 1 and 8, JP ('295) shows an apparatus comprising a cam [40] coupled to a steering linkage bar [18] of a watercraft, and a switch [35] coupled to a fixed portion of the watercraft (figures 1, 2 and 3).

It is well known in the art that the lower cowl structure of an outboard motor functions as a rudder, and the position of the rudder corresponds to the position of the outboard motor. In the present case, the cam activates the switch when the outboard motor – and consequently the rudder – is in a centered position. Therefore, the switch is considered activated “when the rudder of the watercraft is in a centered position”.

The position of the steering linkage bar provides a visual indication of the rudder position, and is therefore considered to be a “rudder position indicator” (preamble of claim 1) or the “means for indicating when the rudder is centered” (claim 8, line 5)

Regarding the limitation “means for contacting the cam” (claim 8, line 3), the switch that comes in contact with the cam when the rudder is in a centered position is considered equivalent to the means for contacting the cam.

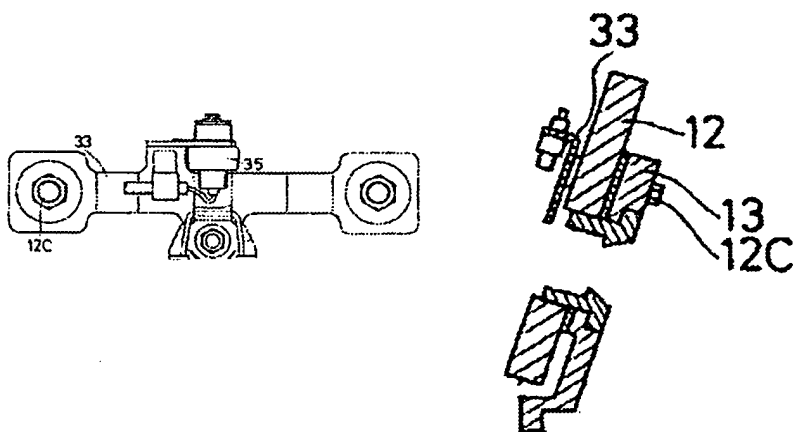
Art Unit: 3617

Re claim 2, the cam is coupled to the steering linkage bar via a clamp [43]. The phrase "clamp hose" has been broadly interpreted to mean a clamp that is capable of attaching over a tubular, or a hose shaped, structure. The clamp of JP ('295) meets such criterion, and is therefore considered to be a clamp hose.

Re claim 3, the switch is coupled to a fixed portion [12] of the watercraft by at least one bracket [33].

Re claim 4, small switches that are operative as "push button" or "snap-action" switches are commonly known as microswitches. The switch of JP ('295) meets such criteria, and is therefore considered to be a microswitch.

Re claim 6, the apparatus comprises a plurality of brackets [33,13], wherein a second bracket [13] and nut-bolt fasteners [12C] are employed to secure the first bracket [33] to the fixed portion of the watercraft. The switch – which itself is mounted on the first bracket – is therefore considered to be secured to the fixed portion of the watercraft by the first and second brackets. *(see simplified illustration below, as modified from figures 1 and 2).*

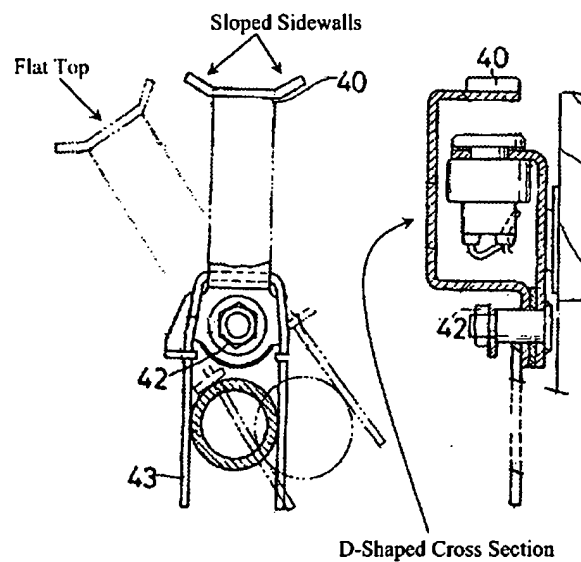


Further, the limitation "brackets are adjustable to adjust a sensitivity of the switch", as best understood from the specification, has been broadly interpreted to mean an "adjustment in

Art Unit: 3617

the position" of the switch. In this regard, a loosening of the bolts would allow both brackets to shift relative to the fixed portion of the watercraft, and would correspondingly change the position of the switch. Therefore, the brackets are considered as being adjustable by loosening of the nut-bolt fasteners, which will adjust the "sensitivity" of the switch, as broadly interpreted above.

Re claims 7, 10 and 11, the cam includes two sloped sidewalls, joined by a flat top portion. The cam has a substantially D-shaped cross-section. (*see simplified illustration below, as modified from figures 2 and 3*)



Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP ('295) in view of Ziehm (US 6,201,483 B1).

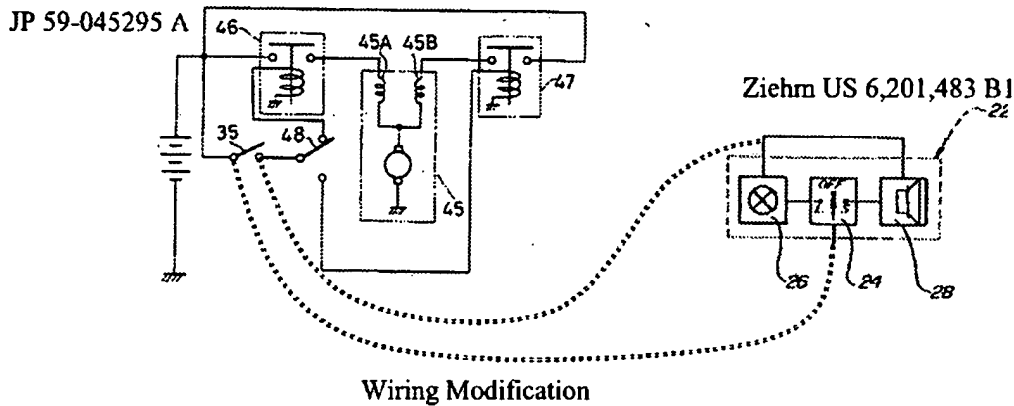
JP ('295) shows a switch that is activated when the rudder of a watercraft is in a centered position, and discloses all limitations of claims 1 and 8.

However, JP ('295) is silent on:

- (i) the switch being electrically connected to an indicator light, or
- (ii) the indicator light being located on a dash of the watercraft.

Ziehm shows boat having an indicator system to signal a centered position of a steering. The indicator system has an indicator light [26] that is activated by an electrically-connected switch [18] when the steering is in a centered position (col. 1, lines 36-48). The indicator light is mounted on a panel adjacent the boat steering wheel or helm station (col. 2, lines 63-64). The "panel" is considered to be an equivalent of a "dash".

It would have been obvious for one skilled in the art at the time of the invention to include an indicator light with the center-detecting switch of JP ('295), as taught by Ziehm. Having such indicator light would have provided a sure mechanism to alert an operator when it was safe to initiate a tilting operation of the outboard motor, regardless of the ambient light conditions. Such indicator light would have also provided a guidance mechanism for steering the watercraft in a straight direction, which would have further improved the operational safety (*see below for a simplified illustration of one possible modification of JP '295, as modified by Ziehm*).



Further, it would have been obvious for one to provide the watercraft of JP ('295) with a dash to locate the light, as taught by Ziehm. Having such dash would have allowed one to place all indicator devices together at a single location, thereby allowing easy monitoring of the watercraft operational conditions. Additionally, placing the indicator light at the dash would have ensured that the operator did not miss the steering centering signal.

Response to Arguments

10. Applicant's arguments filed 12/23/2004 with respect to the rejection(s) of claim(s) 1-5 and 7-9 under 35 U.S.C. 102(b) based on Ziehm (US 6,201,483 B1) have been fully considered and are persuasive. Specifically, Applicant's arguments on page 4 (lines 14-21), that the bar 30 in Ziehm is not a cam, are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference.

Art Unit: 3617

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Winter (US 1,589,673 A) shows a switch [54] that is activated when the rudder is in a centered position.
- JP ('009), JP ('607), JP ('297), ES ('583), JP ('598), JP ('298), JP ('096), JP ('696) show rudder or steering position indicators.

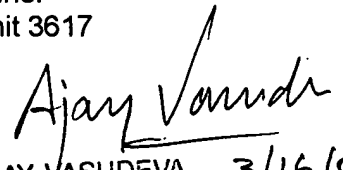
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (703) 306-5992. The examiner can normally be reached on Monday-Friday 1:00 pm--5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva
Examiner
Art Unit 3617

AV


AJAY VASUDEVA
PATENT EXAMINER
AU 3617

3/16/05